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GF Piping Systems

COOL-FIT 4.0
at one glance



COOL-FIT 4.0 Target Market

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Refrigeration (Cooling agent $< 0^{\circ}\text{C}$ / $< 32^{\circ}\text{F}$)



Breweries and wineries



Vegetable and fruit, meat and fish processing



Cold stores



Supermarkets and dairies

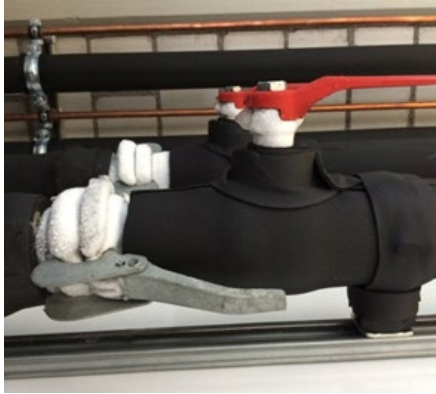
Customer Pains in Refrigeration Applications



Robustness



Condensation and corrosion



Leakage



Weight



COOL-FIT 4.0 Key Benefits

Safe & reliable

- No condensation / ice
- 100 % corrosion free
- Robust / maintenance free

Time saving

- 3-in-1
- 50 % faster installation

Environmental friendly

- 30 % better insulation
- For environmental friendly secondary refrigerants



COOL-FIT 4.0 Key Benefits

Lightweight

Easy handling, low logistic and infrastructure cost

Robust jacket & foam

Less damages and no maintenance costs

Machine guided welding and traceability

Fast, simple & safe jointing, machine secures quality

Chemically resistant

> 25 years life time, 100 % corrosion free and no maintenance

Complete range

Easy planning

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COOL-FIT 4.0 Portfolio



Pipes



Fittings



Valves



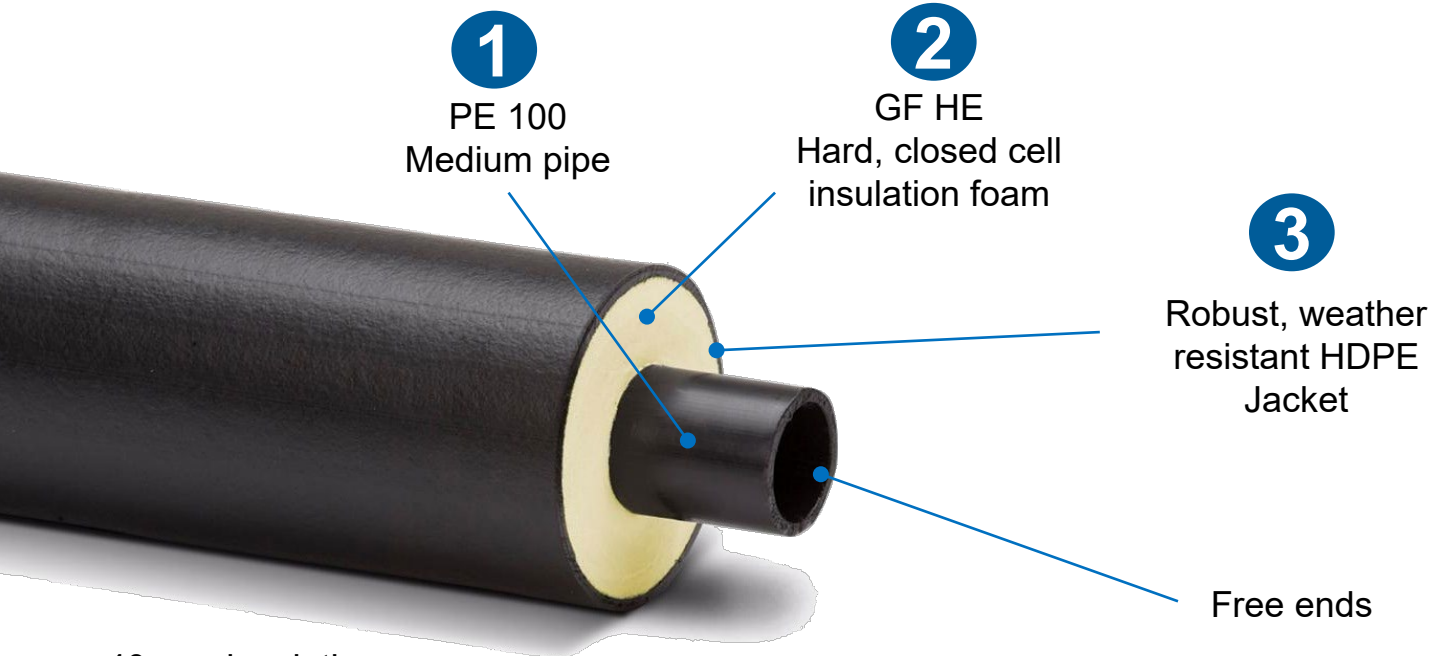
Tools



Flexible hoses

COOL-FIT 4.0 Pipes (3 in 1)

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d/D	d/D
32 / 90	225 / 315
40 / 110	250 / 355
50 / 110	280 / 400
63 / 125	315 / 450
75 / 140	355 / 500
90 / 160	400 / 560
110 / 180	450 / 630
160 / 250	

- 40 mm insulation
- Heat transfer rate 0,022 – 0,026 W/m*K
- Media pipe and jacket insulate additionally

COOL-FIT 4.0 – Fittings (3 in 1)

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1 PE100 electro fusion fitting

2 GF HE - Hard, closed cell insulation foam

3 Protective jacket

Water tight sealing lip



Alignment marks



Welding indicator



Moulded labelling



COOL-FIT 4.0F



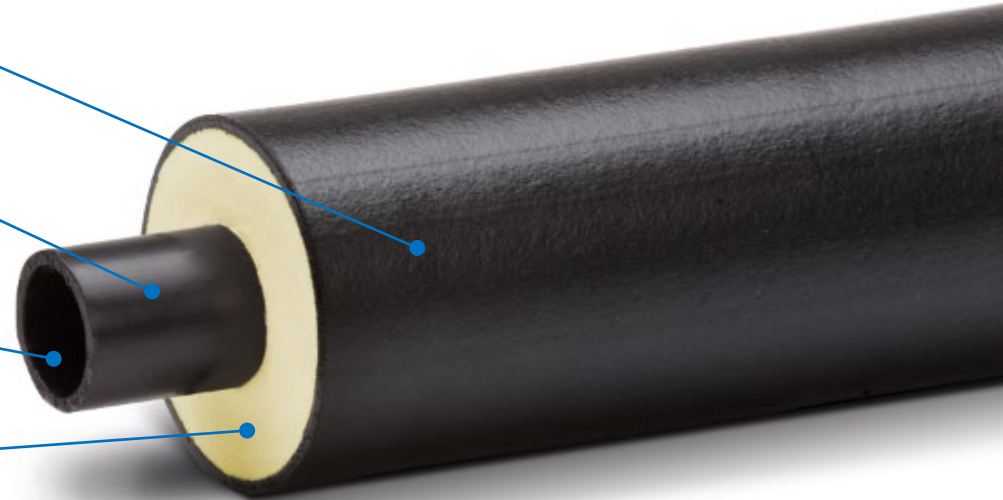
COOL-FIT 4.0F with GF-FR jacket provides increased fire classification

Hard GF-FR jacket

PE 100 Medium pipe

Free ends

GF HE
Hard, closed cell
insulation foam



COOL-FIT Insulated Valves



- Ball & Butterfly valves insulated
- Protective, hard PE jacket
- Vapour tight insulation (no gluing)
- Manual or actuated valves
- ISO-Interface for GF- and third party actuators

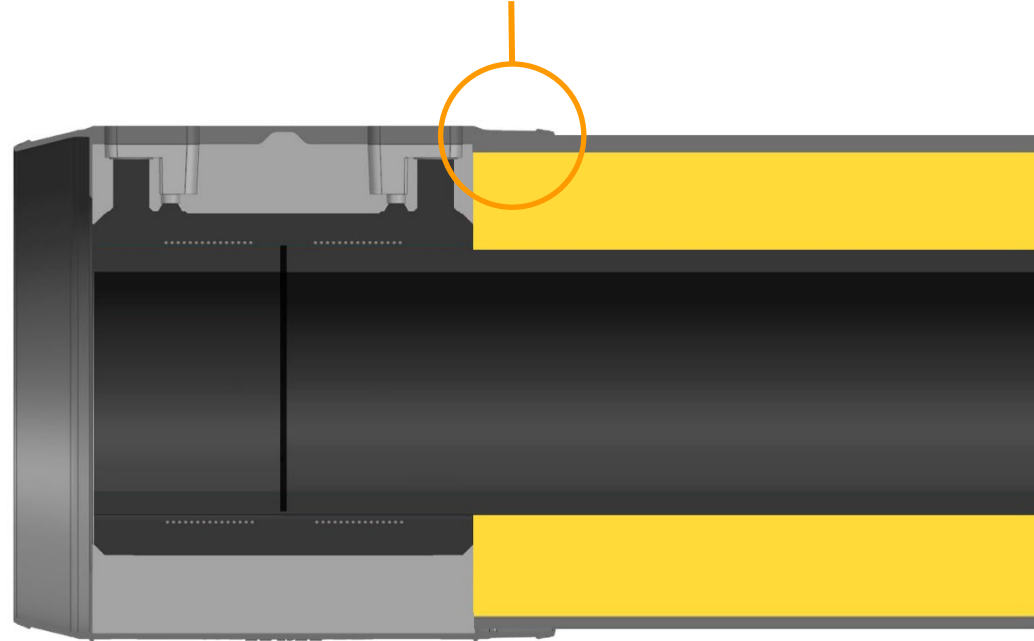
COOL-FIT 4.0 Vapour Sealing Lip



In refrigeration applications liquid temperatures are below 0 °C.
The gap-free perfectly sealed connection between fittings- and pipe insulations avoid ice build-up and damage.



Gap-free connection



COOL-FIT Foam Removal & Peeling Tool

Pipes supplied in 5 m lengths with insulation free, peeled ends.



After cutting pipe to desired length, the GF COOL-FIT Tool can be utilised to provide free ends

- Foam removal in less than 2 min.
- All in one:
 - Cuts outer jacket
 - Releases insulation foam
 - Ensures correct insertion depth
 - Peels inner pipe

Up to pipes with d450mm

MSA Electro Welding Device

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Data storage and easy communication via USB Stick



Compact & 11 kg light



Automatic welding by integrated heat wires



Automatic welding data recognition

System Specifications



	ecoFIT (PE System)	COOL-FIT 2.0		COOL-FIT 4.0	
		COOL-FIT 2.0	COOL-FIT 2.0F	COOL-FIT 4.0	COOL-FIT 4.0F
Materials	PE100	PE100/GF HE/PE	PE100/GF HE/GF FR	PE100/GF HE/PE	PE100/GF HE/GF FR
Insulation	None	22 mm	22 mm	40 mm	40 mm
Jointing	Electro, butt socket	Electro fusion	Electro fusion	Electro fusion	Electro fusion
Fire class	n.a. (E)	E; A ₂ (Rockwool)	B s2 d0	E; A ₂ (Rockwool)	B s2 d0
Weather proof	Yes	No	No	Yes	Yes
Media temp.	- 50...+60 °C	0...+ 60 °C	0...+ 60 °C	- 50...+ 60 °C	-50...+ 60 °C
Size range	d16 – d630	d32 – d140	d32 – d140	d32 – d450	d160 – d225
PN at 20°	16 bar	16 bar	16 bar	16 / 10 bar	10 bar